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“Is Our Transportation System Sustainable?”

Tserendorj Onon
Staff Writer

Even though America only accounts for 5% of the world's population, it uses about 20,680,000 barrels of oil per day. Despite US peak oil production during the 1970's, consumption and net imports have always been on the rise, while the domestic production rate has been declining tremendously. The US imported about \$246 billion worth of oil in 2007, which is \$468,000 per minute. Most of the imported oil comes from OPEC, and 68% of all petroleum is consumed by transportation, 25% industries, 4% residential, 1% utilities, and 2% commercial.

As a part of CSM's Earth Week celebration, Dr. Robert B. Farrington came to campus to present his lecture, "Is Our Transportation System Sustainable?" His talk focused on the current critical oil crisis and new ways to implement renewable technologies and sustainable projects across the world. Farrington started off his lecture by introducing US education system, engineering, and things that have changed since our parent's early childhood, and also a brief lecture



ANDREW FERGUSON / OREDIGGER

on epistemology, and ontology. According to Farrington, there are about 237 million light-duty vehicles on the road in the U.S. In Japan and Europe there are only about 56 million. The U.S. is known to have the biggest consumption of

oil throughout any country thought the world.

According to Farrington, the high usage of oil has caused rapid increases in CO₂ and nitrous oxide emissions, resulting in global warming and environmental damage.

Farrington also believes that only 1.1 to 1.3 trillion barrels of oil are left in the world.

In order to consume less fuel and to save the environment, Dr. Farrington believes that we must use non-conventional fuel, such

as bio-diesel, electricity (batteries and fuel cells), hydrogen, non-fossil methane, non-fossil natural gas, vegetable oil, and other biomass sources. In today's market there are about 36 Flex Fuel vehicle models available, 6 million Flex-Fuel vehicles have been sold, and there are about 1000 public filling stations. Farrington suggested that Hybrid Electric Vehicles, Plug-In Hybrid Electric Vehicles, and Electric Vehicles may resolve the current crisis. Furthermore, Dr. Farrington believes that bio-fuel is the best and most efficient way to solve the energy crisis.

Dr. Farrington holds a PhD in Mechanical Engineering and acts as a Principal Engineer and Manager of the Advanced Vehicle Systems Group at the National Renewable Energy Laboratory. Farrington leads a team of research scientists and engineers in the search for new technologies and processes that will provide economic and environmental benefits and sustainable vehicles for the 21st Century. An international lecturer on advanced vehicle technologies, Farrington has testified to the U.S. Senate Finance Committee on ways to reduce automotive fuel use.

Using nanowires to understand biology

Tim Weilert
Content Manager

Dr. Bret Flanders is an associate professor of physics at Kansas State University and one of many people currently working in the field of nanotechnology, specifically relating to nanowires. Flanders came to CSM last week to give a lecture, however it was not for the Physics Colloquium, but rather for the MME Department. Recognizing his crowd, Flanders gave his physics-based presentation with materials in mind.

Nanowires, within the scope of The Flanders Group's research, can be grown by electrochemical processes and have important applications to cellular biology. By applying a small electrical current to nodes placed in a salt solution nanowires can be grown. "When we switch on the voltage a solidification process occurs and a needle-like structure forms across the electrode gap [...] this shows that the solidification process is pulling ions out of solution and reducing them to form crystals." Furthermore, by altering the salt concentration, voltage, and square-wave frequency, researchers can control growth rates and diameters. However, the size of the wire

is dependent on the raw material from the salt solution.

One of the ways Flanders found that nanowires could be made using such a process was by studying dendritic crystallization. "This was actually a hot area in the physics community in the 80's because the full theory for it was not that well understood. Knowing that dendritic solidification gives rise to the wires tells us what the mathematics are that describe the process." Although tree-shaped dendrites are not always useful in metallurgy, the formation of these crystals at the nano-level helped Flanders observe diffusion limited growth that is dependent on diffusion equations and Fick's first law.

Flanders was then able to use these principles to create nanowires through a variety of methods (both crystalline and amorphous). One of the more important implications of this work deals with its impact on biology. During the presentation, Flanders showed video of amoebas interacting with electrical channels formed by the electrodes. A better understanding of these electrochemical interactions could lead to new innovations in medicine and a greater understanding of life at the nano-scale.

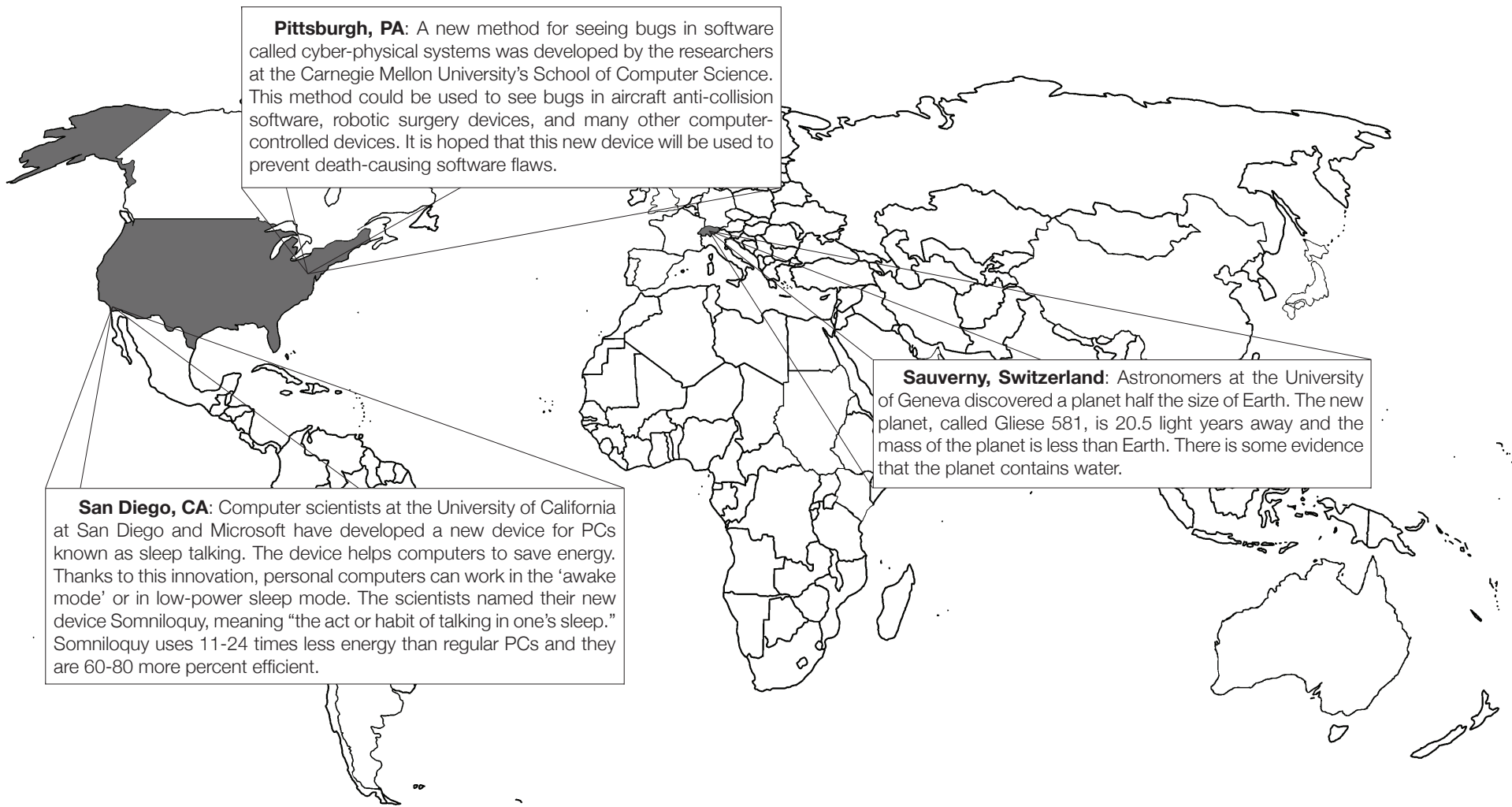


LILY GIDDINGS / OREDIGGER

For more pictures of the Cardboard Canoe Race, pictures of the Trebuchet contest and the Earth Day celebration, see page 7

Scientific discoveries this week

Anand Erdenebileg, Staff Writer



Pittsburgh, PA: A new method for seeing bugs in software called cyber-physical systems was developed by the researchers at the Carnegie Mellon University's School of Computer Science. This method could be used to see bugs in aircraft anti-collision software, robotic surgery devices, and many other computer-controlled devices. It is hoped that this new device will be used to prevent death-causing software flaws.

San Diego, CA: Computer scientists at the University of California at San Diego and Microsoft have developed a new device for PCs known as sleep talking. The device helps computers to save energy. Thanks to this innovation, personal computers can work in the 'awake mode' or in low-power sleep mode. The scientists named their new device Somniloquy, meaning "the act or habit of talking in one's sleep." Somniloquy uses 11-24 times less energy than regular PCs and they are 60-80 more percent efficient.

Sauverny, Switzerland: Astronomers at the University of Geneva discovered a planet half the size of Earth. The new planet, called Gliese 581, is 20.5 light years away and the mass of the planet is less than Earth. There is some evidence that the planet contains water.

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Headlines from around the world

Emily Trudell, Staff Writer

Tonight Show host **Jay Leno** cancelled tapings after checking himself into a hospital in California after reportedly feeling ill Thursday. Leno is reported to be feeling better, and will be back to work this week.

The Center for Disease Control expressed fears that the **swine flu**, which has killed 81 in Mexico, is spreading rapidly into the United States. There have been twenty confirmed cases in humans in the U.S. Swine flu usually occurs in pigs, or in humans that have frequent contact with them.

At least sixty people were killed and 125 more were injured after several **suicide attacks** on a Shiite shrine in Baghdad. Also, a car bomb in the Diyala province killed at least seven others. This series of attacks made Friday the deadliest day in Iraq this year.

The French anti-doping agency confirmed that they would not launch disciplinary procedures against seven-time winner of the Tour de France, **Lance Armstrong**, should he ride in the race this coming summer. An incident occurred this March when Armstrong returned to his home to find an official from the International Cycling Union at his house.

A water color painted by **Adolf Hitler** was sold for nearly \$15,000 at an auction in Shropshire, England. A total of fifteen pieces of art

by the Nazi leader were up for auction.

Authorities arrested seven people in connection to a **child pornography** ring in Mexico City. Officials seized DVD's, CD's, and computers from the suspects, including a Catholic priest, and accused the group of distributing over 100,000 explicit photographs and videos of children.

Records show that instances of animals, such as birds, hitting **air-planes** has increased drastically in recent years, as shown in a study by Federal Aviation Administration. Roughly 3.8% of the incidents at Los Angeles International Airport caused damage to equipment.

The body of

Shylea Myza Thomas, a quadriplegic nine-year-old, was found stuffed into a trash bag in a storage unit. Thomas was taken out of school in January, and had not been seen by relatives or neighbors for at least six weeks. The child's adoptive mother has been arrested.

General Motors Corp. prepared to announce that it will be dropping the Pontiac division of the company. Pontiac was an 82-year-old division of G.M.

North Korea restarted its nuclear weapons program to harvest plutonium. The international community responded with efforts to revive talks with the communist nation, and sanctions against trade.



Local News

To celebrate a \$300,000 National Science Foundation grant awarded to Colorado School of Mines' researchers for collaborative research involving computational models for business applications, U.S. Rep. Ed Perlmutter presented the team today with a "big check."

The project, titled "Design Space Analysis with Hyperdimensional Metamodels," is under the direction of Mines Engineering Professor Cameron Turner.

"With this grant, we hope to develop a computer model that can be used to improve the design of everything from daily consumer goods to renewable energy products," said Turner.

As a result of the grant, the research at Mines is projected to run until August of 2012 and will allow up to two graduate and as many as five undergraduate students to gain valuable research experience.

"Colorado School of Mines has a world class reputation for innovative research and I am proud to support the National Science Foundation on their decision to provide this opportunity for their students. This research will provide opportunities to dramatically reduce the time it takes to design new consumer and commercial products. I strongly believe research funding is vital as we move further into the 21st Century and continue to be a leader on the cutting edge of business technology," Perlmutter said.

Courtesy Colorado School of Mines

Mines alumnus discusses Biosphere 2, systems ecology

Jake Rezac
Content Manager

Mines alum and systems ecologist John Allen visited campus last week to discuss his new book *Me and the Biosphere* and the legacy of the Biosphere 2 project. Allen described Biosphere 2, which he invented and co-founded, as, "The world's largest ecological lab." The massive structure contains eight subsections, called biomes, which emulate natural portions of the Earth, such as rainforests, oceans, and deserts. A team of eight researchers, including Allen, lived in this completely closed system for two years – the longest any group of people has lived in a closed system. Their research has contributed to a better understanding of both ecology and self-sustainability for humans.

Before reading from his book, Allen emphasized how he learned a great deal about change and ecology while a student at Mines.

"What I learned from CSM was how transformative the world is, that it's not just all you can see... there's transformation of energy... and even more, there's a transformation of technologies," he explained. "We don't understand the relation between gases, liquids, and solids. So if we just focus on this one or that one, we're missing the point," Allen explained.

Allen explained how, while growing up, he always had an interest in the Earth. It wasn't until becoming a student at Mines, however, that he understood how to capitalize on that interest.

"Earth is an extraordinary planet," he realized as a child. "I had began to catch on about how to relate me to the biosphere in 1953 when I took a course in Historical Geology taught by Professor Ben Parker at CSM."

Building on this knowledge, Allen began preparations for Biosphere 2.

"The Biosphere 1 [Earth], scientifically speaking, is the total mass of living material at this moment. That's about 1 trillion tons. The mass of the biosphere has remained relatively constant over a large period of time. I set out to test that a biosphere is a cosmic phenomenon and a geologic force capable of operating under extreme conditions."

By 1991, construction on Biosphere 2 had completed, and Allen and his 7 colleagues began their residence in the structure. With humans living there, it became a true biosphere.

"Many people mistake the biosphere as an environment in which

we live. The environment is not the biosphere... we are part of the biosphere," Allen explained.

After Allen's team left the biosphere in 1993, another 7 person team began residence in the biosphere until 1994. Both teams ran experiments relating to self-sustainability in space and ecological understanding. In 1994, Columbia University took over research, running experiments on the effects of carbon dioxide on plants. Finally, in 2007, the University of Arizona took over the facility, with its focus being on education for the public and Earth-systems research center.

Allen ended his talk, with his hope for the future, based on his experiences with the Biosphere 2 project.

"I think every country should have a biosphere... and these would be tremendous teaching units... for people to handle total systems and get a feel for quantitative measures for qualitative units."



PHOTO COURTESY WIKIMEDIA COMMONS

Mines students teach science to Ugandans

Dave Sommer
Guest Writer

We are taught that the modern age has required of us, of its human benefactors, a reexamination of the self, of the role of the individual in the now global community. This is realized on many levels: in the classroom or the university, in the discourse of nations, in the parent teaching his or her child the cultural narratives that have been molded and transfigured by generations. It remains nonetheless apparent that the question still hangs in the air, that the role is unresolved, and that human necessity confronts us with the demand to choose. For the student, this confrontation is manifested in education itself. What we are taught must be distilled into something we can believe. Our classes, our projects, our ideas hinge on the resolution of the ideological confrontation. Often, when the matter is too pressing, we are content to let the question slide, to declare the point mute and meaningless. Yet, when the world demands a justification of our choices, we are at a loss for words. It is at this moment that we must choose.

Social institutions make a point of stating their purpose outright, of making the ideological choice that justifies their creation and perpetuation. One merely needs to search their websites to get a sense of this. It is interesting, then, when the individual must define his or her role within an institution. The problem becomes much more complicated than a one sentence mission statement. For the past two years, these dynamics have been at work in the National Science Foundation sponsored humanitarian engineering teams.

A group of Mines students have been using their knowledge of math and science over the past two years, in coordination with Mines faculty, staff, and members of the community, to serve the global community in exactly this way. The students have been helping St. Denis Secondary School, a small school in a poor rural Ugandan community, improve its ability to educate its students about applied science. In this regard, the Mines students have developed lesson plans, designed to help Ugandan students pass the national exams of Uganda, as well as give the Ugandan students a deeper and more intuitive understanding of experimentation and science in general. They have also developed a LON-CAPA-like environment to help teachers improve their students' ability to solve numerical problems.

Maria Camp, founder of Into Your Hands, a group based out of Evergreen, CO dedicated to helping children and families in rural Uganda, first contacted Mines about St. Denis. After having lived in Uganda for a number of years and needing a community service project for a group she was involved in, she visited St. Denis. "I visited St. Denis and Makondo in 2004 and again in 2006. After visiting the school, the students, and their families, I knew I could not turn my back and walk away from their hopes and dreams," Camp explained.

With Into Your Hands, she has provided over 100 scholarships per year for orphaned secondary

school students, helped complete construction of the schools library, and furnished the computer lab with computers, an internet connection, a printer, a scanner, and a copier. Furthermore, the group has provided beds and mosquito nets for the girl's dormitory at the school and is working on providing the same for the boy's dormitory. Working with CSM Humanitarian Engineering students and Dr. Dave Munoz, they helped implement a water system which benefits both St. Denis and the community.

Despite all this work, there is still much to be done. "Although the library building is completed, there are no books in the library! Last year, we collected funds for 100 required books... this year we are holding a rotary sponsored book drive to collect over 10,000 books that will be shipped to supply books for 5-6 school libraries." With this in mind, the Mines students have teamed with book publisher Pearson to supply textbooks related to the curricula they've created.

Scott Day, a representative for Pearson, explained why they are eager to help the St. Denis. "[I]n a brain-powered world, no job is more important than helping people to learn. That is precisely what these Colorado School of Mines students and the 'Into Your Hands' organization are doing for the people in Uganda." The following books are being given to St. Denis' library. 4 copies of *Biology 8th edition* by Campbell, 4 Instructor resource CD ROM/DVD's for Biology 8th edition, 4 copies of *University Physics 12th edition* by Young and Freedman, 4 instructor resource CD ROM/DVD's for University Physics 12th edition, 1 copy of *Five Easy Lessons: Strategies for Successful Physics Teaching* by Knight, 1 copy of *Biological Inquiry: a Workbook of Investigative case Studies* by Campbell and teacher's guide. According to Day, "These are the tools that the teachers need to provide a world class educational experience for the students at St. Denis Makondo Senior Secondary School."

Mines teachers Dr. Barb Moskal and Dr. Bob Knecht are also involved in the project. Both believe the project will be beneficial to the students of St. Denis. "The world is increasingly becoming a global economy. In order to compete in this economy, all students need an appropriate education in mathematics and science," according to Moskal. "We don't believe that our curriculum is perfect. However, it is a start in the right direction," she added. Knecht feels similarly. "It is our responsibility to develop something appropriate for them. If you make it so they can use it... and can change it, it will grow... and they will start making changes and...it will be sustainable."

It seems fitting that the information revolution at the heart of globalization should be used to improve the lives of people now connected in a global community like the students of St. Denis. This is one approach to the ideological and sociological challenges posed by modernity. Improving the education of an interconnected world is one step toward resolving the problems of an imbalanced society. One accepts a stake in the world. One chooses a role.

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Alec Westerman
Staff Writer

Chauvenet Hall, home to Math and Computer Science offices and classrooms as well as Environmental Engineering labs, is named after Dr. Regis Chauvenet, one of the most influential figures in Mines history. A chemist and metallurgist, Chauvenet was President of Mines from 1883 to 1902 and named President Emeritus in 1913.

Chauvenet was born in St. Louis, Mo. in 1842. He would receive a bachelor's degree from Washington University in St. Louis and would go onto Harvard University for his graduate degree. After getting his graduate degree, Chauvenet moved back to St. Louis, where he was an analytical chemist for the Missouri Geological Society.

Chauvenet made a number of important reforms in his tenure at Mines. The school was desperate for students, and most who did attend the school left once they learned how to prospect for gold. With Chauvenet's influence, however, the school was transformed into a specialized mining and engineering school, leading to the world-renown degree it boasts today. Furthermore, Chauvenet recruited a number of world-class professors, including Paul Meyer.

Chauvenet has another accomplishment whose impact is still felt; he prevented Mines from being consolidated with the University of Colorado at Boulder. The idea, of which many in the Colorado Leg-

islature were fond, would have put all of Colorado's state-funded tertiary education under the same administration. However, many in the Mines community were strongly against the idea, which would have prevented Mines from being as specialized as it is today. Eventually, the outcry from Chauvenet and the people of Golden would force the legislature to change their mind. The very existence of the school today may be due to Chauvenet's insistence that the schools remain separated.

By the end of his tenure as President, Chauvenet had transformed the school into a world-class institution. After retiring from the

Chauvenet prevented Mines from being consolidated with the University of Colorado at Boulder.

school in 1902, Chauvenet began writing a history of the Colorado School of Mines. The work hadn't been finished when he died, in December of 1920 at age 78. A copy of this unfinished work is still available in the library.

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CSM End of the Year Band Concert

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It's Linux time!

TECH BREAK

Ian Littman, Tech Break Columnist

This year, a lot has happened in the computer world, particularly with operating systems. "A lot" meaning the introduction of a solid, downloadable version of Windows 7, which reached "release client" status at build number 7100 on Friday. Microsoft is doing a nice job of creating an operating system that works well even on lower-end machines (a friend's older Dell notebook with 512MB of memory runs the operating system just fine). They're also adding features and making their OS look closer to that of Apple's.

However, while Apple and Microsoft are chugging away at a release of their operating systems every few years, a free competitor is growing more and more powerful, releasing a new edition every six months and capturing low-end markets like netbooks and cell phones. This system is Linux, of course.

Linux is cool due to the fact that it can scale from cell phones to servers quite easily. In the server space now, it's the standard, powering the majority of websites, including Facebook. The reason: high reliability, no cost, and the ability to tailor a system for yourself if needed since all the system's source code is out in the open. Found a bug? Code a fix, or let others know who will, in relatively short order, do it for you.

The one market that Linux hasn't cracked yet is the mainstream computer one, though it's getting close. After all, if your typical day involves surfing the web, checking e-mail, and using productivity applications, all of that can be done in Linux. You can even play all the media you want with the help of programs like VLC, which is available for Windows, Linux, and Mac OS. You won't be getting Microsoft Word, but the alternative is very good, will run on an older computer, and costs as much as you want to donate to it

(which can be nothing if you like).

There are a few main Linux versions, which serve to confuse people seeking to enter the Linux world. Essentially, they're just slightly varying bundles of Linux components with a splash of branding and a dab of glue to keep the whole thing together, working smoothly and relatively easy to use. For servers, the de facto operating system these days appears to be CentOS, from the makers of Red Hat Linux. It doesn't get updated as often as other distributions, but it's rock solid, something you want when serving the web. CentOS is actually what powers the server The Oredigger's website runs.

For the desktop, there are many more valid choices, though the leading one seems to be Ubuntu at this point. It's easy to use, has a broad following, works well with Windows (it'll run inside Windows if you want it to) and has the backing of companies like Dell, who puts it on their lower-powered netbooks. People haven't really accepted it as a server operating system, but it's run by installation on a virtual server anyway. The reason: a few terminal commands and you're running a full desktop operating system accessible from anywhere in the world via remote desktop for only \$10 to \$15 per month.

Or just run the operating system from a "Live CD," a feature pioneered by the distant relative Knoppix. "Distant relative" in this case means being based on the same core feature set: Debian Linux. Without going into too much detail, Debian and RedHat are the two "camps" for major Linux versions, and they do things slightly differently, though if you put the branding of one on the other, a casual user can't tell the difference. At any rate, Live CDs are probably the best way to try Linux out, especially desktop distributions; if

you don't like Ubuntu, drop in a Fedora DVD (the more progressive, desktop-oriented, RedHat-based system) or one from Linux Mint (like Ubuntu but slightly better, and focused only on desktop usage). Want a "light" operating system that is mind-blowingly fast? Pick up Puppy Linux or Damn Small Linux (that's the name, look it up); either distribution will run entirely within the confines of your system memory, even if your system is eight years old.

The second best way to run Linux is in a virtual machine. Sun's (now technically Oracle's, thanks to their recent purchase of Sun) VirtualBox application, mentioned here before, makes this an easy task, whatever operating system you're on. What's more, VirtualBox is free. The cost in time to set up Linux in VirtualBox is slightly more than just booting from a live CD, but you'll end up with something much faster. Plus, if you're running a rather nonstandard rig that Linux drivers themselves wouldn't support, just virtualize your Linux; the performance hit for regular applications is minimal.

The bottom line: Windows and OS X aren't the only operating systems out there. Take the summer to check out a version of Linux or two; pop in a CD or set up a virtualized install of your favorite distribution (Ubuntu is a good place to start) and play with it. You'll be surprised how great a system you can get for free. As an added bonus, it's one very legitimate reason to use that shiny new BitTorrent program you...uh...just downloaded. You watch all your movies from iTunes and Hulu, right?

P.S. Got a computer question? Need help picking out a new system for the new school year? Drop me a line, and I'll see if I can help. My e-mail is ilittman@mines.edu, and the rest of my contact info is at <http://ianlittman.tel>. I'm also on Facebook, if that's how you roll.

"String theory" quartet performs at library

Gene Duran
Staff Writer

Last Friday, the "String Theory Quartet" played a series of pieces to a full audience at the Arthur Lakes Library. Renee Fracese, Kendall Aubertot, Michael Bratton, and Jeff Miller have been playing together for nearly two years, and they've worked hard for the performance.

The String Theory Quartet was formed in the Fall of 2007 when all the members were interested in physics in some way. "Our name is a bit of a direct reference to that, since we are all interested in studying physics in one shape or form, except for Kendall," said Renee. Kendall defends that he was interested in physics before he decided on Computer Science.

Renee is a third year geophysics major, Michael is a second year physics major, and Jeff has a B.S. in engineering physics and a masters in Mechanical Engineering. Kendall has been playing violin for 14 years, Jeff for 20, Renee for 12, and Michael has been playing the cello for 8. They also all play in the Jefferson Symphony Orchestra and the Evergreen Chamber Orchestra under Dr. William Morse.

Their selection included the first movement of "Ameri-

can" by Antonín Dvorák, the second movement of "Death and the Maiden" by Franz Schubert, the third movement of the first string quartet by Dmitri Shostakovich, and the fourth movement of Alexander Borodin's first string quartet in A. As a bit of an encore, they played "Tango: Por una Cabeza," a piece with a more Latin feel.

The group was very well coordinated and was practicing diligently leading up to the time of their performance. "Should we be coordinating our breathing at the end? What about our heartbeats?" they jokingly discuss before the performance. The group seemed very at ease when they started playing for the audience.

As the only girl in the quartet, Renee keeps the group on track. "She pretty much runs the show, and she coordinates our outfits too," said Kendall, indicating the group's matching ties. "She was always the one on time, but lately Jeff and I have been showing up before her," said Michael.

The group also performs for other events. They played a few times for weddings and once for an engagement at Red Rocks for a couple. A person from the audience asked if the girl said yes. "Unfortunately, we didn't get paid afterward, so I don't think she did."



ANDREW FERGUSON / OREDIGGER

Earth Day Tree Planting



ALL PHOTOS AKIRA RATTENBURY / OREDIGGER

STUDENT ORGANIZATION LEADERS

> Questions about how the new tier structure will effect your organization ?

The Board of Student Organizations will be holding **Individual Placement Meetings** during Dead Week (April 27 through May 1) and over the first two weeks of the Fall 2009 semester.

These meetings are for organizational presidents – please ask yours to come by – so that they may declare their organization's tier for the 2009-2010 academic year.

Sign-ups are in the Student Activities Office.

Geek of the Week

...Brandon Fisher, Junior: Engineering Physics

Gene Duran
Staff Writer

[Oredigger]What's your major?
[Brandon] Physics.

Why?
Is there anything else?
Do you like the physics classes?

More or less.
Which classes are you taking now?
Quant lab, chem II, PA, Analog Electronics, Honors modern physics, Epics.

That's a pretty hefty list.
I finished the calc series at 13.

How old are you?
16. By credits, I'm a junior.

What's a geeky fact about you?
My middle name is Lucas, and I was named after George Lucas.

Star Trek or Star Wars?
It's hard to make a comparison between the two, because to me, they're like bedtime stories. You might as well ask me which I like more, Little Red Riding Hood or Goldilocks.

Faster-than-light drive or Low-orbiting ion cannon?
FTL drive.
What's your favorite part about the inter-

net?
I consider the internet to be the greater tubes.

What sort of music do you listen to?
I listen to Bradsock, MC Frontalot, Jonathan Coulton, and The Lonely Island.

Do you play any video games?
I've been playing Doom before I had the hand-eye coordination to finish the first level.

What's your favorite experience at Mines so far?

I went out to McDonald's with a few friends in the hall, and we got pulled over because we had a broken taillight. At the next intersection, we got pulled over again. I got ticketed for breaking curfew and had to call my parents. Thankfully, they weren't available to answer the phone, and I was let off the hook.



ANDREW FERGUSON / OREDIGGER

Cardboard, trebuchets, and the health center! EPICS Project presentations

Tim Weilert
Content Manager

"This is the most fun I've ever had in a class at Mines," said Rachel Kirchner as she dragged the remains of her cardboard boat out of Clear Creek. Many teams were excited to get their boats in the water after the annual E-Days race had been postponed due to weather, however conditions were still cold and moist, making for a chilly experience.

As a part of the EPICS program, some teams earned class credit for developing their design throughout the semester. When the time came to finally put the finished product in the creek, many teams ran into a few slight problems. Daniel Haughey and Seth Daugherty of Team Epic Disaster told about their group's experience. "When we got in, we actually broke one of our pontoons, then about halfway through, at the first rapid, we started to take water," said Haughey. Daugherty commented, "Other than that it went pretty well. We survived."

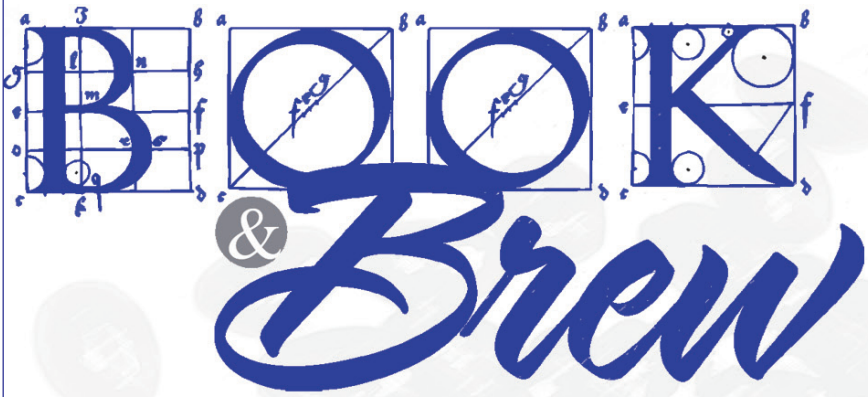
At the end of the race, awards were handed out for the best designs and times. Top Gun won best structure, the fastest team was Nighthawk with their "Up Till Dawn" boat, Cracklin' Rose won second-best-overall, and Mermaid won

best theme and best overall team.

Following the races was the trebuchet contest on the IM fields. Teams built catapults that could be tuned for accuracy and distance. Levi Gustin of Pendulus Throwicus explained what went in to building his team's trebuchet. "Lots of math, lots of hard work, some money, sweat, tears, and a pinch of love." All contestants fired at a cardboard castle adorned with the CU Buffs logo. Judging for both the cardboard boat race and trebuchet contest was provided by Tau Beta Pi.

However, not all EPICS projects involve freezing in Clear Creek or throwing projectiles. As a part of the EPICS151 class, students have developed designs for the Coulter Student Health Center. In a letter from Debra Roberge, Director of the Student Health Center, the goal of the project is "to build a state of the art Wellness Center that will meet the physical and mental healthcare needs of the students at CSM and accommodate a projected increase in enrollment."

The 18 most outstanding models will be presented at the EPICS Final Celebration Thursday, April 30, from 6 to 9 PM in the Engineering Hall Annex. Everyone is encouraged to take part in the presentations and support the student teams.



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Cardboard boat race



Trebuchet contest

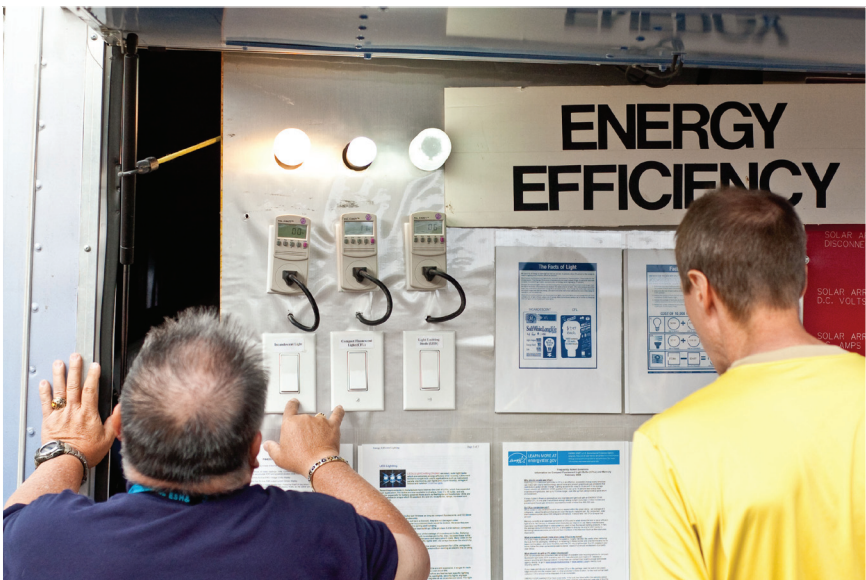


BOAT RACE AND TREBUCHET PHOTOS PATRICK BESEDA / OREDIGGER



EARTH DAY PHOTOS ANDREW FERGUSON / OREDIGGER

Earth Day



Must See Movies School

Benjamin M. Weilert, Staff Writer

With the end of school quickly approaching, it's time to look forward, and to reminisce. For some of us, the real world awaits, with jobs and full responsibility for our lives. For others, there's still much more school to be experienced. At any rate, education can define someone almost as much as their personality or their physical appearance. With an entire summer approaching to fill our time with relaxation, work, or even more school, take a little time out to watch this week's Must See Movies to see what could await after graduation, what a party life could be, or what taking a personal day is really like. Thanks again to all my faithful readers and, goodbye.

1. *The Graduate* (1967)

The moment you walk across that stage and pick up your diploma from four (or more) years of college, your life will drastically change. What does one do after college? Well, in the case of Benjamin Braddock (Dustin Hoffman), the answer isn't quite as simple as "Plastics." With his parents expecting great things from him, Benjamin starts an affair with Mrs. Robinson (Anne Bancroft), the wife of Benjamin's father's business partner. Things get even more complicated when Benjamin ends up falling for Elaine Robinson (Katharine Ross), Mrs. Robinson's daughter. Placed at #17 on the American Film Institute's top 100 list, *The Graduate* has a stellar soundtrack put together by Simon and Garfunkel and many memorable moments and quotes.

2. *National Lampoon's Animal House* (1978)

For many people, college is the best time to party as hard as they can. Unfortunately, some people who go to college aren't necessarily equipped well enough socially to pull off such a feat. This is where Delta House comes in. This fraternity full of misfits has been on the Dean's hate list for some time due to many illegal activities. In order to try and get the entirety of the Deltas expelled from Faber College, the Dean enlists the help of the more respectable fraternities. Unable to go down without a fight, the Deltas manage to pull off the unthinkable during the Homecoming parade. Some interesting trivia about this film is that it is the debut of actor Kevin Bacon and was filmed on a college campus that originally denied *The Graduate* to be filmed on its grounds.

3. *Ferris Bueller's Day Off* (1986)

Perhaps the most difficult feat in high school is the successful day of playing hooky. Not only do you have to trick your parents into thinking that you're in school or too incapacitated to attend, but you have to be careful not to get caught. Enter Ferris Bueller (Matthew Broderick), a street-smart student who has decided to take a personal day from his studies. Brought along for the ride are his best friend Cameron Frye (Alan Ruck) and his girlfriend (Mia Sara). During their day out on the town, Principal Ed Rooney (Jeffrey Jones) is on a mission to catch Bueller in the act of skipping school. After a full day exploring Chicago, Ferris must make it back to his house in time to maintain his ruse.

For Homework – See *Revenge of the Nerds* (1984)

Movie Review: *The Crow*

Bree Waltman
Staff Writer

Remember the days when summer meant you had three months to do absolutely nothing? When those three months seemed like a year? Now it is just work, internships, and Maymester. Well, here is a blast from those sun soaked days.

Originally written in graphic novel form by James O'Barr (published by Caliber Press in 1989), the movie was released in 1994 starring Brandon Lee, son of martial arts master Bruce Lee. The story chronicles what happens one year after a couple was murdered on Halloween eve, the night before their wedding.

In a Detroit-like city, a vicious gang rules the night with a standing tradition of setting as many fires as they possibly can the night before Halloween. They call it Devil's Night. Only this Devil's Night will end a little differently than the rest. Eric Draven (Lee) returned to his invincible body on the one year anniversary of his death. Because the crime against him and his fiancée was so brutal, his soul could not rest and so came back to set things right. Accompanied by the crow charged with ferrying his soul to the land of the dead, Draven avenges his death, proving that not even death can stop true love.

Slightly violent, but not tastelessly, this film became a cult classic shortly after its release, particularly due to the mysterious circumstances surrounding its making. An onset accident towards the end of production extinguished a brightly burning life. During a scene where Eric Draven

walks towards a gangster as he shoots him, a malfunction in the prop gun fired a lethal bullet instead of only firing a blank. Brandon Lee died on set, leaving his own fiancée alone and triggering a large investigation into his death. The film was still produced and the mystery of the star's death brought attention to what might have otherwise been a mediocre movie.

As testament to the popularity of the original movie, three sequels have been made under the same premise. A TV show has also been added to the list. Merchandise is common and through popular demand, the original graphic novel, out of print for many years, was re-released with new features, including a tribute to Brandon Lee.

Both the graphic novel and the film exhibit wonderful cinematography, using shadows and darkness, almost monochromatic, sets to pull the reader/viewer into the harsh world. The graphic novel is done completely in black and white to beautiful results, which have been known to captivate budding artists into attempting emulation. The film also focuses on dark shades; Draven himself wears exclusively black and off-sets this with white and black face paint. More than using just visual aids, the film takes an unusual stance on the soundtrack. All songs listed on the official soundtrack are heard when panning through buildings or on passing car stereos. Together, paper and film make for stunning composition.

This film is well worth the watch, both for the cinematic brilliance and the strong bonds it makes between loved ones. After watching it, there is left the need to connect with lost friends and to hold

Both the graphic novel and the film exhibit wonderful cinematography, using shadows and darkness, almost monochromatic, sets to pull the reader/viewer into the harsh world.

Noble has it in stock across the street from Colorado Mills Mall. You may just find a new favorite book. And remember to keep dear ones close; anything can happen.

Beer Review: Beers around the world

Akira Rattenbury
Staff Writer

Believe it or not, the semester is almost over. For seniors like myself, the next two weeks will likely fly by like we wished finals would a few years ago.

I figure a bit of recap-ping would be appropriate before the summer. Hopefully some of that disposable income from your internship will come in handy for many of you who would like to sample the finer side of beer. I have included my choic-est of choice beers for your approval.

Victory Festbier: Oktoberfest Lager 4.5/5

Most anything from Victory Brewing out of Pennsylvania is a winner. This German-style Marzen is a powerful reminder of why Bavarians love their beer. The solid malt body with caramel sweetness round out this keeper. Sample Paulaner, Spaten, or Sam Adams Oktoberfest beers if you like the style. \$9 seasonal.

Lion Brewery Stout 4/5

Really smooth stouts which blend sweetness with strength are hard to come by. Some stouts overdo the coffee and chocolate notes and forget the touch of bitterness and refreshment every beer needs. However, the Lion Stout is a well-balanced Sri Lankan treat, both smooth and textured. Compare with Guinness or Left Hand's Milk Stout. \$9

Odell Brewery Iso-lation Ale 4/5

No it's not winter, and yes, this is a winter ale. Next winter, pick up a sixer of this sweet elixir which is pleasantly strong and rich with Cascade and Magnum hops balancing the dominant malt textures. Try anything from Odell and you won't be disappointed, or try New Belgium's 2⁰ Below for comparison. \$8 seasonal.

Aldaris Porteris 4/5

Strong, dark, and smoky! This

Latvian porter blends a sweet burnt taste with typical porter essence. Added stale grains give an acidic pop and balance. Try Flying Dog's Gonzo Imperial Ale or Ska

Brewing's Ten Pin for comparison. \$3 bomber bottle.

Saison Dupont 4/5

The quint-essential farmhouse ale. This Belgian heifer is yeasty, gritty, sour, and delicious. The Dupont is potent to the last drop with fruit esters and skunky tastiness. Check out Hennepin from Brewery Ommegang or Lagunita's #10 for good American renditions. \$5 bomber.

A very Brewing India Pale Ale 4/5

My heart is with the American IPA. If you enjoyed some of this magic on Earth Day, I'm sure you understand why it's top rated and one of my favorites. Hops, hops, spices, and more hops make this style my top pick. Odell's, Stone Brewing, Dogfish Head, and Russian River also make excellent hop-heavy IPAs while experimenting with yeasts, brewing stages, citrus and spices. \$7 Samuel Smith Pale Ale 3.5/5

The English red is a tad heavy on the bitter and lacks the balance and fullness of other Pale Ales, but it's one of the originals and it's delicious. What this beer lacks in hops, it makes up for in berry notes and more subtle dryness in a medium-bodied ale. Try Old Speckled Hen or Bass (the red triangle beer) for variety and more substantial spices. \$2 bomber.

Beers of note which I didn't sample for the paper, but are certainly worth a sip or two:

Sierra Nevada Pale Ale, Weltenburger Kolster Bock, Cisk Extra Lager, Old English 800 (the pinnacle of refinement), Sam Adams Summer Ale, Lagunitas Lumpy Gravy, New Belgium Mighty Arrow, Great Divide Samurai Ale, Hoegaarden, and Green Flash Hop Head Red.



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Cultural Diversities

Georges M. Ngonyani
Staff Writer

I would like to begin my article with a Swahili saying, “Hakuna marefu yasiyo na ncha” which in English means, *there is nothing without an end*. Everything, including time, has an end. August 2008 was the beginning of my time in the United States. However, within a couple of weeks, I will be heading back to Tanzania, the land of Kilimanjaro and wild life such as the Serengeti. I will be going back after being hosted by the City of Golden, and specifically, the Colorado School of Mines.

As I arrive home, based on my culture, I expect several question from my wife, Clara, relatives, and friends. Asking many questions is part of our culture. The following questions are the basic ones that one will be asked when returning from a journey. I would like to share with you a couple of these questions and the responses I will give:

Questioner: How did Americans treat you?

Georges: Humanly. They treated me as their fellow human beings, but with more respect than I expected.

Questioner: Did you feel yourself lonely, homesick, or isolated?

Georges: Not really. Right from the first day at CSM, I managed to get a friend. I was amazed by the reception of a smile from everyone I met. I thought they knew me. Their smile made me not being afraid of asking anyone for help.

Questioner: Do you say they were smiling at you even though they did not know you?

Georges: Exactly! That is the reality. You meet someone, s/he smiles at you as a sign of friendship.

Questioner: We hear that Americans are really busy people, what did you see?

Georges: That is true in one way but not in the other. What I saw is

that they are strict with time, they are not ready to waste time meaninglessly. They work hard, but they have time to spend talking to friends.

Questioner: Do they say sorry if they do something wrong?

Georges: They have the word sorry. I guess it is the second to thanks in use other than “Hi.” They say sorry even with just a slip of the tongue.

Questioner: What kind of food were you eating? I do not think that they have ugali there!

Georges: Ah! There are so many kinds of food there such as hamburgers, rice, macaroni and cheese, and hot dogs. Also, even though they do not eat ugali, I could make ugali using corn meal.

Questioner: Do you mean that Americans eat dogs? And what is corn meal?

Georges: Hahaha! You think like I did when I heard hot-dog for the first time. Hot dogs look much similar to sausages in shape, but they taste different a little bit. I can say it is a sandwich consisting with a frankfurter in a split roll and is usually eaten with mustard. Corn meal is the same as what we call maize flour here.

Questioner: Right, but are the hot dogs called so because they are made from dog’s meat?

Georges: No dog at all. It is just a name, I guess they use pork or beef. Dogs are pets there. They board cars as human beings. They have names and are addressed by she/he -not it as we do here.

Questioner: Mh! That’s really different. We just keep them for defense or hunting. Anyway, what did you like most about Americans? Or, what do you want us to know about them?

Georges: Good question. I tell you what I have seen and happened to me. Americans are very friendly people, hospitable, and have a sense of humor. They were asking me

whether there was something that I needed. I got several jackets and blankets from my friends to keep me warm. If I needed to go somewhere, they could just give me a ride for free. What else do you want!

Questioner: Oh! That seems interesting, we cannot do like that here. I wouldn’t imagine if this could be possible because we hear that they are the busiest people in the world, that is why they are the developed nation.

Georges: You are right, but the reality is that the sense of humanity is really high. You can note some differences in New York city where almost every one seem to be busy, but that is the same even in our biggest city, Dar es Salaam, here. After all, people from different parts of the world visit New York. I think it will be unfair to say that everyone you meet in NY is an American. I will thus assure you that Americans are good people.

Dear reader, these are just some of the common questions I expect. To be fair to the space in the paper, let me finish by a vote of thanks to all of you. Thanks to Sara Post on behalf of the Oredigger staff. Thanks for offering a space to publish my articles - I find myself quite honored. Thanks CSM community for the cooperation you showed to me. Thanks to the Golden city community. Also, thank to all the students I have taught, professors who taught me, and the students that took classes together with me. All of you widened my understanding of the Americans’ culture. I am going home with the role of evangelizing the United states and its people. I will miss America, I will miss you all. Welcome to Tanzania. When you plan to climb Kilimanjaro, let me know at mchayanog@yahoo.co.uk. I could express my heartfelt thanks with only two words in Kiswahili, asante sana. However, my English has brought me to choose these three, thanks a million.



Minds at Mines

Studying and stress levels

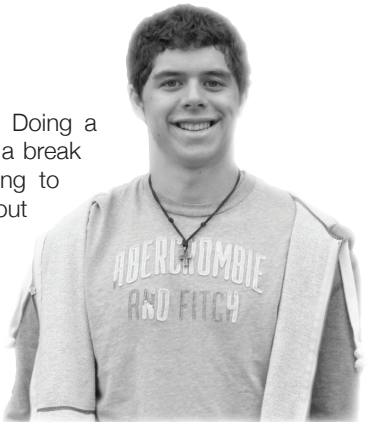
Roby Brost
Staff Writer

Ready or not, here they come... Once again finals are here and students around campus are hunkering down and hitting the books even harder than usual. Numbers are crunched with a frightening regularity, grades are speculated upon more avidly than bets are placed at the races. It is a common occurrence to see students hard at work at mealtimes, hoping that the next desperate few hours will help retain the information and knowledge acquired throughout the semester. With finals looming, how do students at Mines manage to maintain the equilibrium between studying and sanity?



“I manage my stress with lots of baking and eating chocolate. I’m not really studying anymore. That’s the best part. But I still feel ready for my finals. I think that the rest of the school year has prepared me for them.”

Heather Oertli



“I’m taking it easy and relaxing. Doing a combination of studying and taking a break like Facebook, or Halo or something to relax and not stress too much about finals. If you study the whole time and stress out, you’re going to fail. Hopefully, I’m still ready for my finals. We’ll find out. But I’m putting in the consistent time, so we’ll see what I know.”

Brit Welch



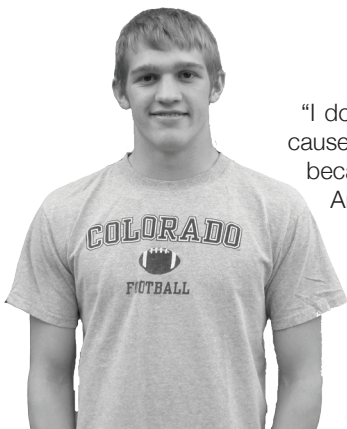
“I’m taking out my dog, making sure that she gets enough exercise, and keeping it easy. The biggest thing is to make sure that I am getting enough sleep, because I have a tendency to go to sleep at four and get up at seven... It’s just not enough sleep. I think that for the most part I am ready for finals. There are still a few classes that I have to keep studying for. My hardest finals are probably the ones that I’ll do best on so, I’m going to keep studying for Mechanics and Materials.”

Justin Frahm



“I make sure that I am studying with friends, because alone I can’t really do it, I get discouraged really easily. The friends also play a part in the relaxing bit. The only thing that keeps me sane here are friends and having a good time. Sometimes going out to a restaurant at like four in the morning because we have to be up doing homework anyway. Eating there and having fun keeps it from being too hard core.”

Haroun Omar



“I do normal studying. It’s kind of nice because you don’t have to worry about stress because there are no tests but the finals. And after finals there is field session. But besides regular studying, I’ve been heading down to the creek a lot.”

Mick Ramsey

Tim's two cents

Important things I learned this year

Tim Weilert
Content Manager

This is it! The last issue of the year, another 26 newspapers in the books. Everyone always gets nostalgic during New Year's and birthdays, but I say, “Why not take some time to reflect now?” In the past year, I’ve been all over the place and seen some pretty amazing things, here are the highlights.

1. The DNC: Whether or not you agree with the politics of the whole thing, Denver turned into one of the biggest parties the city has ever seen. As a shameless plug for recruiting writers I’ll say this: We got to go to the DNC on press passes with the Oredigger, so you should join the newspaper next year, we have perks.

2. When dealing with the Secret Service, always make sure you have clean gym shorts: When Obama

came to campus, I covered the event, and had weightlifting class right afterwards. Enough said.

3. Nano technology: I went to a lot of lectures about nanowires and nanotubes. From what I gathered, this stuff is the wave of the future. Furthermore, I learned that the Van Tuyl, MME, and Physics Colloquium lectures all have free food.

4. Toilets: On at least two different occasions I heard guest lecturers talk about the need to rethink the way we do waste. If we want to truly become sustainable we need to stop wasting so much water on poop.

5. Music + Blog = Awesome!: I learned that if you do something well, people notice and you begin making serious connections. This past February, we started “Something Like Sound” and only a few months into this experiment, we’ve already worked with some pretty

important people. Also, if you love music and want to write for the blog, contact me at tweilert@mines.edu.

6. Former Colorado Governors: Both Bill Owens and Dick Lamm came to CSM during the spring semester. While they both had interesting views, what I found most interesting was how they were no longer searching for approval from the public.

There are probably more things that I could talk about here, but it will have to wait. I’ll leave you with this last thought: Getting involved in what’s going on may be difficult at some times, but it is worth it. Get informed and get active!

Editorials Policy
The Oredigger is a designated public forum. Editors have the authority to make all content decisions without censorship or advance approval and may edit submitted pieces for length so long as the original meaning of the piece is unchanged. Opinions contained within the Opinion Section do not necessarily reflect those of Colorado School of Mines or The Oredigger. The Oredigger does not accept submissions without identification and will consider all requests for anonymity in publication on a case-by-case basis. Submissions less than 300 words will receive preference.

Rugby - bummed out but not beaten

Benjamin Johnson
Staff Writer

After arriving home from the national tournament, the Mines rugby team was disappointed by their losses but thrilled by the memories forged and hopeful for next season. The University of South Florida handed Mines their first loss of the tournament with a score of 37-14. Mines then played Humboldt State University who won 19-13.

Overall, Tony Ross felt that Mines played better against South Florida but said they should have won the game against Humboldt but simply did not play “to our potential, we did not play our game for sure.”

The national tournament was a different experience for the team. “Really, the experience of going to nationals is a very new experience, our first, to be precise,” said Mike Ross. “There was a lot of pressure going in and I believe that reflected a lot in our game play. We didn’t play anywhere near our best. We are a very relaxed team, very cool under the

collar, and I believe the nervousness was not working in our favor.”

“Just playing at that level is something in itself...,” Tony Ross agreed. “Hopefully it gets our name out there more and we can get some more people to come out for the team.... [it was a] great season, we really didn’t

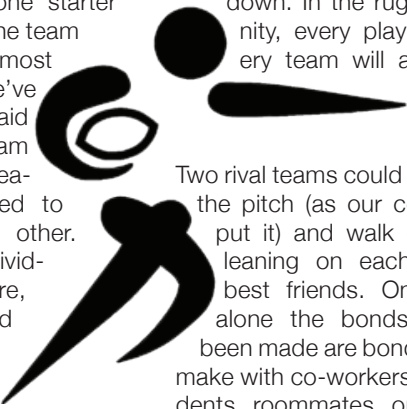
“There was a lot of pressure going in and I believe that reflected a lot in our game play. We didn’t play anywhere near our best.”

[next year], me, so the team will be one of the most veteran teams we’ve ever assembled,” said Mike Ross “The team going into next season is well adjusted to playing with each other. They’re not just individual athletes anymore, but a well meshed machine. They will be the best team in our region next year and I’m excited to see how far they’ll go in nationals next year now that they’re more experienced with the whole process of

it all.” Tony also said that the main goal for the team next year would be “making it back to nationals and representing Mines better than we did this year.”

Next fall there will be sign-ups for the team at the annual Celebration of Mines event. Practices will be Tuesday, Wednesday, and Thursday nights from 5:00 PM to 7:00 PM. The team will start a few weeks into the new school year and everyone interested in joining the team is welcome to come. For those interested, Tony Ross said the best part of the team is the “camaraderie you get from it and the team is a different set of guys with rugby as their interest.” Mike agreed with Tony saying that the best part is “the players, hands down. In the rugby community, every player from every team will always have a ‘band of brothers’ if you will.

Two rival teams could do battle on the pitch (as our coach would put it) and walk off the field leaning on each other like best friends. On our team alone the bonds that have been made are bonds you don’t make with co-workers, fellow students, roommates, or even family. It’s so much deeper than that. These boys will be my brothers forever, and I’d put it on the line for any single one of them.”



SCOREBOARD

Courtesy CSM Athletics

Apr. 14, 2009 – Colorado School of Mines posted a pair of wins in Rocky Mountain Athletic Conference (RMAC) action against UC-Colorado Springs on Tuesday afternoon at the CSM Softball Field. The Orediggers won game one by a score of 10-2 and shutout the Mountain Lions in game two for an 8-0 victory.

Apr. 22, 2009 – Eight student-athletes from Colorado School of Mines have been named to the 2009 Academic All-Rocky Mountain Athletic Conference baseball teams, as announced today by the RMAC. Congratulations to Andrew Ryan, Anthony Siderius, Cris Rogers, Bryan Coday, Cody Hinchman, Chris Pickett, Bryan Wagner, Nick Wong. The Orediggers’ Andrew Ryan and Anthony Siderius have earned First Team Academic All-RMAC recognition. For Siderius, the honor marks the second consecutive year in which he has earned First Team accolades. Ryan garnered Second Team honors in 2008 while Cris Rogers, who was named to the Academic All-RMAC Honor Roll last season, was Mines’ lone selection to this year’s Second Team Academic All-RMAC squad.

Five student-athletes from the Colorado School of Mines softball team have earned Academic All-Rocky Mountain Athletic Conference honors, as announced today by the RMAC. Four Orediggers earned First Team honors. For Sarah Van Lingen, this marks the second consecutive year in which she has garnered First Team recognition. Taylor Cayou, Jackye Lagen and Margie Cone all earned First Team accolades for the first time.

The Colorado School of Mines men’s track & field team is ranked 22nd in the USTFCCCA (U.S. Track & Field and Cross Country Coaches Association) Outdoor Track & Field Dual Meet Rankings released this morning, Thursday, Apr. 23rd. This season, four CSM men’s track & field athletes have recorded NCAA provisional qualifying times. Ben Zywicki posted qualifying times in the 1500 m and the 10,000 m. Zywicki won the 1500 m event at the University of Colorado Invitational. Nick Maynard has two provisional qualifying times; both in the 800 m. Mack McLain and Aaron Swift also posted provisional qualifying marks. McLain did so in the 1500 m and Swift’s qualifying mark came in the 10,000 m. The Colorado School of Mines men placed ninth at the NCAA Division II Indoor Track & Field National Championships on Mar. 13th and 14th at the Yeoman Fieldhouse on the campus of the University of Houston. The ninth-place finish for the Orediggers was the eighth top-25 finish for the CSM men at the indoor championships. It was also the highest-ever finish for a CSM team (men or women) at the indoor championships. The CSM track & field squads will compete at the Jack Christiansen Invitational in Fort Collins, Colo. (hosted by Colorado State) on Saturday, Apr. 25th.



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Fool's Gold

"It's the end of the world as we know it."

Pi officially changed to 3

Clear Creek turns into chocolate

Zachary Boerner
Mathematical Genius

In a move that shocked the scientific community, leading scientists at the Royal Institute for Science Stuff declared that the mathematical constant pi, widely known as 3.14159265 (or 22/7 if you're feeling lazy or for some reason decide to work in fractions), would be changed to exactly 3.

The RISS stated that they feel this move is appropriate in a society increasingly over-run by services such as Twitter

and MySpace, where attention spans obviously run no longer than a few seconds.

When asked what attention spans had to do with a mathematical constant, the RISS replied, "When do you look at a constant and read all the numbers? Seriously, people can't read beyond the 3, and besides, it's not like the rest of t" before they ran out of characters for the 140 character limit on Twitter.

The change of pi to 3 is only the most recent in a line of changes instated by the RISS.

Other changes include the change of phi to 2, e to pi, and any number that has more than 3 digits being rounded to the largest place.

RISS hopes that the move will help make math more accessible to younger people and idiots. RISS feels that, while math may be dumbed down, this is overall a good move for the industry and for science.

Shortly after the incident, another Mars rover crash landed on the surface of Mars, following some idiot being let into the lab and calculating things with 3.

Zachary Boerner
Golden Ticket Winner

Clear Creek, long known for being clear, turned into chocolate this past week, surprising longtime residents of Golden and Idaho Springs.

"We thought that maybe some mud had made its way into the creek and that it would soon clear up. Turns out that it's stayed this way, and it's delicious!" Said resident Dr. Inks Alot. Dr. Alot was doing research into how to make Clear Creek taste like awesome. Turns out his research is pointless, now.

Idaho Springs residents first noted that something was wrong on Tuesday, when the creek first started looking a bit muddy. Residents flocked to the edge of the water to find out what was wrong, with a few less-bright residents tasting the waters. They reported the usual taste of mine runoff, but that it was quickly being overrun by the wondrous taste of chocolate.

Coors, known for using Clear Creek waters to cool their beer, stated in a press release that they were going to change to a chocolate factory.

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The press release started by the current owner of Coors, Pete Coors, walking slowly down a series of steps in a purple tux with a noticeable limp. After the announcement that Coors was changing its main operation strategy, he then invited 5 children into the factory to see the new chocolate waterfall, now with 50% less mine runoff.

One of the children is now in the hospital because of heavy metals poisoning. He is in good condition and is expected to be released Sunday.

"It was delicious!" He said weakly.

Another child was found squashed under a steamroller, bleeding blue, while another was found in a dumpster behind the factory. The fourth child is reported to have been seen on the news, but no one is quite sure and keeps blaming the bad reception.

In other news, a glass box was seen flying around Golden while a troupe of small people has been singing songs out near the now chocolate Clear Creek.



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SRC BLOCK PARTY



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CAUCASIAN INVASION



TENNIS



BASKETBALL

CHUY'S CHULLOS



SWISSROLLS



FOOSBALL



FA-Q



SHOOTER MCGAVINS



HIGH JUMP
JESSE EARLE

CONGRATULATIONS
2009 SPRING REC
CHAMPIONS



DECKER/STEWART



MACK/KING



MIDOGGIN



800 RUN



400 DASH



60 DASH



60 HURDLES



4x400 -SWISS ROLLS



4x100 -AFTERBURNERS



LONG JUMP

DAN PALMER



MILE RUN

KEVIN FRANZEN



60 DASH

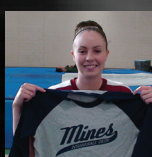
KAREN KRAN

TRACK & FIELD
mines
recreational sports



400 DASH

NICOLE KOSTECKY



SHOT PUT

AIMEE DAVIS



4x100 -ALPHA PHI



LONG JUMP/HIGH JUMP

JENNY WAGNER

TABLE TENNIS



ROY/GALLOWAY

NCAA PICK 'EM



TONY DAVISON



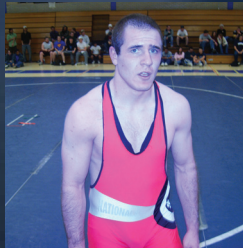
137LBS



145LBS



153LBS



161LBS



HEAVYWEIGHT



215LBS



170LBS



180LBS



193LBS

MADDEN



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